

AMENDMENTS TO THE CLAIMS:

Kindly amend claims 1 and 5, as shown below.

This listing of claims will replace all prior versions and listings of claims in the Application:

Claim 1 (currently amended). A measuring instrument for noncontact measurement of conductivity of a silicon wafer using a microwave, the measuring instrument comprising:

an oscillator operating at a frequency not more than 100 GHz for oscillating the microwave;

a circulator connected to the oscillator;

a horn antenna connected to the circulator, the horn antenna transmitting the microwave to an upper surface of the silicon wafer and receiving a reflected wave from [[a]] the upper surface of the silicon wafer;

a detector connected to said circulator, the detector outputting a voltage proportional to a square of magnitude of the wave from the upper surface of said silicon wafer; and

a computer for computing conductivity of said silicon wafer from said voltage.

Claim 2 (previously presented). A measuring instrument according to claim 1, wherein said circulator is connected to the oscillator through an isolator.

Claim 3 (previously presented). A measuring instrument according to claim 1, wherein a frequency of the microwave oscillating in said oscillator is 94 GHz.

Claim 4 (previously presented). A measuring instrument according to claim 2, wherein a frequency of the microwave oscillating in said oscillator is 94 GHz.

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Claim 5 (currently amended). A conductivity measuring instrument for noncontact measuring of ~~conductivity~~ conductivity of a silicon wafer using a microwave, the measuring instrument comprising, in combination:

an oscillator for oscillating of the microwave;

a circulator connected to the oscillator;

a horn antenna connected to the circulator, the horn antenna transmitting the microwave to the silicon wafer and receiving a reflected wave from a surface of the silicon wafer;

a detector connected to said circulator, the detector outputting a voltage proportional to a square of magnitude of the reflected wave; and

a computer for computing conductivity of said silicon wafer from said voltage as a function of an absolute value of reflectance.

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